Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the present application.

Listing of the Claims:

Claims 1-5 (canceled).

6. (Currently Amended) A method for generating an image signal when estimating a motion of image sequences, motion vectors indicating, for each picture block of a current image, a position of the picture block used for a prediction with respect to a chronologically preceding reference image, the motion vectors being formed for each picture block, the method comprising the steps of:

in a first search step, determining a first motion vector with a pel accuracy;

starting out from the first motion vector, in a second search step, determining a second motion vector with a sub-pel accuracy by an aliasing-reducing interpolation filtering, using a digital filter, a resolution being selected to be higher than that corresponding to a resolution of a pixel raster in the first search step, more than four neighboring pixels being utilized for an interpolation of each pixel, to interpolate pixels between a scanning raster for the first search step; and

in a third search step, starting from the second motion vector, determining a third motion vector by a further interpolation filtering using the digital filter, a resolution being increased once more in comparison with the second search step, an interpolation being carried out on the basis of a pixel raster, with a resolution in the second search step;

wherein coefficients for at least one of the interpolation filtering in the second search step and the further interpolation filtering in the third search step are determined from a minimization of the interpolation error performance, on the basis of a linear system of equations whose coefficients are derived from the

principle of orthogonality, whereby said coefficients for at least one of the interpolation filtering in the second search step and the further interpolation filtering in the third search step are adapted to signals to be coded to achieve aliasing-reducing interpolation filtering with increased resolution of the motion vectors leading to a prediction gain and an increased coding efficiency.

7. (Previously Presented) The method according to claim 6, wherein the image signal is a prediction signal for video images generated using a motion-compensating prediction.

8. (Previously Presented) The method according to claim 6, wherein the more than four neighboring pixels are more neighboring pixels than are utilized for a bilinear interpolation.

9. (Previously Presented) The method according to claim 6, wherein, for the interpolation filtering in the second search step, an FIR filter is used having filter coefficients CO1 = 161/256, CO2 = -43/256, CO3 = 23/256, CO4 = -8/256.

10. (Previously Presented) The method according to claim 6, wherein for the further interpolation filtering in the third search step, an FIR filter is used having FIR filter coefficients CO1' = 1/2, CO2' = O, CO3' = O, CO4' = O.

11. (Previously Presented) The method according to claim 6, further comprising the steps of:

in order to predict video objects, separately conditioning, for each video object, filter coefficients of the digital filter; and

inserting the filter coefficients into a transmission bit stream at a beginning of transmission of an object in question.

12. (Previously Presented) The method according to claim 6, further comprising the step of:

adapting, for an encoding of a motion vector for a transmission, a range of values of motion vector differences to be coded to an increased resolution.